ACKNOWLEDGMENTS

1. The Examiner acknowledges receipt of the amendment filed 5/16/11 wherein the specification was amended. In addition, the Examiner acknowledges receipt of the amendment filed 3/28/11 wherein claims 1-192, 195-213, and 222 were canceled and claims 193, 217, and 221 were amended.

Notes: Claims 193, 194, 214-221, and 223-230 are pending.

RESPONSE TO APPLICANT'S AMENDMENT/ARGUMENTS

2. The Applicant's arguments and/or amendment filed 3/28/11 to the rejection of claims 193, 194, 214, 215, 219-229, and 230 made by the Examiner under 35 USC 102, 103, and/or 112 have been fully considered and deemed persuasive-in-part for the reasons set forth below.

Written Description Rejection

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 193, 194, 214, 215, 217, 219-221, and 223-230 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicant is reminded that an Inventor is entitled to a patent to protect his work only if he/she produces or has possession of something truly new and novel. The invention being claimed must be sufficiently concrete so that it can be described for the world to appreciate the specific nature of the work that sets it apart from what was before. The Inventor must be able to describe the item to be patented with such clarity that the Reader is assured that the Inventor actually has possession and knowledge of the unique composition that makes it worthy of patent protection. The instant application does not sufficiently describe the invention as it relates to the reaction reactants and products that are compatible with the instant invention. Specifically, one cannot ascertain if Applicant's invention will work with ALL reactions that produce a radiopharmaceutical. In addition, Applicant is reminded that while a generic claim may define the boundaries of a vast genus of radiopharmaceuticals, the question may still remain as to whether or not the specification, including original claim language, demonstrates that Applicant has invented species sufficient to support a claim to a genus. In this particular instance, the problem is especially acute since the claims are directed to a desired result without describing the reactants without describing species that achieved the desired result. What the Reader gathers from the instant application is a desire/plan/first step for obtaining a desired result. While the Reader can certainly appreciate the desire for achieving a certain end result, establishing goals does not necessarily mean that an invention has been adequately described.

While compliance with the written description requirements must be determined on a case-by-case basis, the real issue here is simply whether an adequate description

is necessary to practice an invention described only in terms of its function and/or based on a disclosure wherein a description of the components necessary in order for the invention to function are lacking. In order to satisfy the written description requirement, the specification must describe every element of the claimed invention in sufficient detail so that one of ordinary skill in the art would recognize that the Inventor possessed the claimed invention at the time of filing. In other words, the specification should describe an invention and does so in sufficient detail that one skilled in the art can clearly conclude that the Inventor created what is the claimed. Thus, the written description requirement is lacking in the instant invention since the various terms as set forth above are not described in a manner to clearly allow persons of ordinary skill in the art to recognize that Applicant invented what is being claimed.

APPLICANT'S ASSERTIONS

In summary, Applicant makes the following assertions: (1) the specification describes every element of the claimed invention in sufficient detail so that one of ordinary skill in the art would recognize that the Inventor possessed the claimed invention at the time of filing; (2) the Examiner's interpretation of the invention is not correct. The invention is directed to using benzyl alcohol to increase the recovery of the radioactivity in a given radiopharmaceutical composition, not radiopharmaceutical increases anytime benzyl alcohol is present in the mixture. (3) Applicant unexpectedly found that the addition of benzyl alcohol solubilized radiopharmaceutical compositions of limited solubility. Applicant's assertion is based on paragraph [0023] and Example 23

of the originally filed application. It is set forth that in Example 23, in the absence of benzyl alcohol only 85.3% of the radioactivity could be recovered from the vial while the addition of benzyl alcohol increased the recovery of radioactivity significantly to 96.7%. (4) One skilled in the art reviewing the specification would understand that the addition of benzyl alcohol would improve the recovery of radioactivity significantly (i.e., by more than 10%). (5) Also, it is asserted that one skilled in the art is well aware of which radiopharmaceutical compositions or radiolabeled chelators are of limited solubility. (6) The description is more than adequate to show that Applicant was in possession of the instant invention at the time of filing.

EXAMINER'S RESPONSE

Applicant's arguments were considered, but deemed non-persuasive for the following reasons. Review of paragraph [0023] in the instant application emphasizes information from paragraph [0022]. In paragraph [0022], it is disclosed that the first approach of the instant invention involves adding (a) a radiolysis stabilizing solution containing a mixture of gentisic acid, ascorbic acid, human serum albumin, benzyl alcohol, a physiologically acceptable buffer/salt solution at a pH of about 4.5 to 8.5 and one or more amino acids selected from methionine, selenomethionine, selenocysteine, or cysteine to (b) a radiolabeled compound immediately after the composition is radiolabeled.

Paragraph [0023] which Applicant refers to in the response discloses that the buffer/salt solution is preferably selected from phosphate buffers, citrate buffers, or

physiologically acceptable sodium chloride and mixtures thereof having a molarity from about 0.02M to about 0.2M. The paragraph further discloses that the reagent benzyl alcohol is a key component to Applicant's procedure/formation and a bacteriostatic is critical in the composition/procedure. Thus, based on paragraphs [0022] and [0023] alone, specific conditions are present and necessary to obtain a desired response (the results obtained from Example 23). Note that independent claim 193, lines 1-5, only disclose that benzyl alcohol interacts with the radiopharmaceutical composition. In other words, the radiostabilizing ingredients, buffers, etc. are missing from the claim which are deemed necessary according to paragraphs [0022] and [0023] for a desired result. Hence, it is benzyl alcohol in combination with the components of the first, second (paragraph [0024]), third (paragraph [0028]), or fourth (paragraph [0030]) approach that result in the desired results.

In regards to Applicant's assertion that a skilled artisan reviewing the specification would understand that the addition of benzyl alcohol would improve the recovery of radioactivity significantly (i.e., by more than 10%), the following response is offered. In the specification, Applicant has not stated that significant radioactivity recovery is 'more than 10%'. Based on Example 23 which Applicant is relying upon, the following is true (the results of Example 23 are disclosed below).

Table 24: Comparison of RCP and % Recovery of ^{177}Lu-B in the presence and absence of benzyl alcohol

	RCP (%)	RCP (%)	Recovery (%)	% remaining in
	t=0	t=24 hr		vial*
Sample-03 [no benzyl alcohol]	~100%	~100%	85.3%	14.7%
Sample-02 [with benzyl alcohol]	~100%	~100%	96.7%	3.3%

* % of the radioactivity remaining in the glass vial, unrecoverable

[00232] These results demonstrate that the addition of benzyl alcohol to the stabilizer solution improved recovery of radioactivity from the vial significantly. This is important, as if a significant amount of the radioactivity cannot be removed from the vial, then extra radioactivity must be added to offset this loss. It is highly advantageous to have recovery be as high as possible.

From the results of Example 23, there is a difference between the samples of is 11.4%, not 'by more than 10%' which encompasses values less than the 'required' 11.4% difference. Thus, if Applicant is using Example 23 to define what is meant by a 'significant difference' then, it is an amount of '11.4%', and not values less than 11.4%. Also, it is noted that the difference in radioactivity is not limited to the interaction of benzyl alcohol alone, but benzyl alcohol in combination with other components. Specifically, claim 23 discloses that Sample 01 (A) in *ascorbic acid* and 9 parts of *normal saline* were utilized whereas in Sample 02 (B) *ascorbic acid*, *bacteriostatic saline*, and *benzyl alcohol* are utilized.

EXAMPLE 23

Determination of the effect of benzyl alcohol on the recovery of ^{177}Lu-B

[00227] Two radiolysis protecting solutions were prepared as follows:

[00228] Stabilizer Solution A: One part 500 mg/ml L-Ascorbic acid, pH 5.7 containing 0.25 mg/ml Na_2-EDTA was diluted with 9 parts of normal saline solution [no benzyl alcohol].

[00229] Stabilizer Solution B: One part 500 mg/ml L-Ascorbic acid, pH 5.7 containing 0.25 mg/ml Na_2-EDTA was diluted with 9 parts of Bacteriostatic saline, which contained 0.9 % (w/v) benzyl alcohol.

[00230] A 100 µL aliquot of 0.2M NaOAc buffer, pH 4.8 containing 1 mg/mL L-selenomethionine and 13 µg of Compound B was added to each of two 2-mL sample vials, designated Sample 1 and Sample 2, respectively. Approximately 10 mCi of $^{177}LuCl_3$ was added to each vial and the samples were heated at 100° C for 10 minutes in a temperature-controlled heating block. They were then removed and cooled in an ambient temperature water bath for 5 minutes. After cooling, 400 µL of Solution A was added to Sample 1, and 400 µL of Solution B was added to Sample 2.

Notes: It is duly noted that in Solution B, it is two radiostabilizers, ascorbic acid and benzyl alcohol, used in combination. Also, it is noted that ascorbic acid is a necessary component for Applicant's first approach; bacteriostatic saline is a critical component of the first approach; the presence of a buffer is a necessary component of the first approach; the amino acid, selenomethionine is a necessary component of the first approach; and Compound B and 177LuCl3 which form the radiolabeled compound are both necessary components of the first approach. Thus, certain conditions/components must be present in Applicant's procedure/composition in order to obtain the desired results.

In regards to Applicant's assertion that one skilled in the art is well aware of which radiopharmaceutical compositions or radiolabeled chelators are of limited solubility, the following response is offered. One of ordinary skill would not know which radiopharmaceutical compositions or radiolabeled chelators Applicant is referring to having limited solubility because (1) it is unclear what components are required in Applicant's composition/radiolabeled chelator and (2) the specification does not set forth specific types or groups of species Applicant that yield the desired results. In addition, the specification does not set forth what conditions Applicant is using to define 'limited solubility' which is a relative phrase since it is subject to varying definitions depending on how one defines a 'limited' solubility. The phrase 'limited solubility' is disclosed on page 6 of the specification (paragraph [0023]), line 5. However, no explanation of the phrase is provided. Also, the phrase is found on page 33 of specification (paragraph [0011]), line 2, but, once again, no explanation is provided as to what conditions Applicant is applying to define the phrase.

As a result of the analysis above, the written description rejection is deemed proper since the application does not sufficiently describe conditions outside of Example 23 that are necessary and will result in the desired results of the instant invention.

Essential Subject Matter Missing

The rejection under 35 USC, first paragraph, for essential subject matter being missing is WITHDRAWN.

112 Second Paragraph Rejections

I. The rejection of claims 221, 223, 224, 226, and 229 because of the phrases 'analogs and derivatives thereof', 'analog thereof', and 'derivatives thereof' is WITHDRAWN.

II. The rejection of claim 225 because it is unclear what GRP agonist or peptide Applicant is claiming that confer agonist activity to the desired molecule is WITHDRAWN for reasons of record in Applicant's response.

III. The rejection of claim 222 is WITHDRAWN because the claim has been canceled.

IV. The rejection of claim 228 is WITHDRAWN.

V. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 193, 194, 214, 215, 217, 219-221, and 223-230 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 193, 194, 214, 215, 217, 219-221, and 223-230: The claims as written are ambiguous because it is unclear what reactants are present in the reactions. In addition, it is unclear if Applicant is claiming that the instant invention will work in ALL reactions that produce a radiopharmaceutical composition in the presence of benzyl alcohol.

APPLICANT'S ASSERTIONS

In summary, Applicant refers to paragraph [0023] and Example 23 of the specification for support that one has unexpectedly found that the addition of benzyl alcohol solubilizes radiopharmaceutical compositions of limited solubility. In addition, it is asserted that Example 23 illustrates that the addition of benzyl alcohol would significantly improve the recovery of radioactivity (by more than 10%) for radiopharmaceutical compositions of limited solubility.

EXAMINER'S RESPONSE

Applicant's arguments are not persuasive for the following reasons. One skilled in the art would not understand that the addition of benzyl alcohol, absent all the other components/conditions set forth in Applicant first approach and Example 23 would result in significant radioactivity recovery for the reasons stated previously in this office action. Also, in the examining of the claims, limitations present in the specification are not imported into the claims. In other words, all the conditions/components necessary to yield results such as the minimum recovery of radioactivity defined as significant in Example 23 are not limitations disclosed in independent claim 193. For evidence of the Examiner's position, Applicant's attention is directed to MPEP 2111 which sets forth that while claims are given their broadest reasonable interpretation consistent with the specification, the reading of a claim in light of the specification to thereby interpret limitations explicitly recited the claim is quite different from reading limitations of the

specification into the claims. MPEP 2111 goes on to disclose that it is impermissible to import limitations from the specification into the claims.

Claims 193, 194, 214, 215, 217, 219-221, and 223-230: The phrase "increasing recovery" in independent claim 193 is a relative phrase which renders the claims indefinite. The term "increasing recovery" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. In particular, it is unclear what the radioactivity recovery is being compared to in order to determine whether or not an increase is actually present. Also, how one defines the term 'increase' varies from person to person, it is unclear what guidelines Applicant has established that must be met in order to truly determine if an increase in radioactivity is truly present.

APPLICANT'S ASSERTIONS

In summary, Applicant asserts that the skilled artisan would understand that recovery is the amount of radioactivity that can be removed from the vial when its contents are removed. Applicant refers to Example 23 of the specification for support that radioactivity remains deposited on the vial walls and thus increase in recovery of radioactivity by more than 10% would be understood as being a significant increase in recovery. Thus, it is Applicant's position that 'significantly increasing recovery' is sufficiently defined.

EXAMINER'S RESPONSE

Applicant's arguments are non-persuasive for the following reasons. The issue is not what is the definition of the term 'recovery', but what is considered an increased recovery, now a 'significantly increased recovery' when no guideline are provided to define what Applicant intends by a 'significantly increasing recovery' of radioactivity. Applicant relies on Example 23 to define 'significantly increasing recovery radioactivity'. Example 23 discloses that the difference between the control and sample is 11.4% even though Applicant is now stating that the phrase is meant to mean 'more than 10%'. However, Applicant is reminded that limitations from the specification are not imported into the claims. One does not know what Applicant's intentions are for defining the phrase since 'significant' is a relative term and the specification does not specifically set forth a definition of the term.

102 Rejection

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 193 is rejected under 35 U.S.C. 102(b) as being anticipated by Gustafson et al (British Journal of Industrial Medicine, 1985, Vol. 42, pages 591-595).

Gustafson et al disclose the influences of organic solvent mixtures on biological membranes (see entire document, especially, abstract; page 592-593, 'Influence of Solvents on Membrane Integrity'; pages 594-595, bridging paragraph). In particular, Table 3 (page 594) discloses release radioactivity in benzyl alcohol alone and benzyl alcohol and ethanol. The released radioactivity of benzyl alcohol is disclosed at 5.0 $\pm$ 3.7 and benzyl alcohol and ethanol is 50.9 $\pm$ 9.3. Thus, both Applicant and Gustafson et al disclose an increase of radioactivity recovery resulting from a radiopharmaceutical composition reaction.

APPLICANT'S ASSERTIONS

In summary, the following assertions are made. The claims require a method of significantly increasing recovery of radioactivity from a reaction that produces a radiopharmaceutical composition of limited solubility. Gustafson neither teaches nor suggests any method involving a radiopharmaceutical composition. Instead, the reference is directed to bacteria labeled with 14C (which has very low energy and a long half-life) and is not useful as a radiopharmaceutical. Also, it is asserted that Gustafson teaches away for the claimed invention since it indicates that benzyl alcohol alone is not a particularly good solvent for improving radioactivity recovery from the radiolabeled bacteria. Furthermore, it is asserted that in Table 3 of Gustafson (page 594), the treatment of the cells with benzyl alcohol extracted only 5.0 +/- -3.7% of the radioactivity which is a poor result.

EXAMINER'S RESPONSE

Applicant's arguments are non-persuasive for the following reasons. First, it is noted that limitations as to what is a significant increase in recovery of radioactivity is not present in the claim. The claim involves any radiopharmaceutical composition that in some way has a 'limited solubility' that in the presence of benzyl alcohol has a greater yield than that observed absence benzyl alcohol. Secondly, the abstract of Gustafson discloses a reaction that occurs with E. coli in the presence of 14C-oleic acid to result in the incorporation of 14C-phosphatidyl-ethanolamine (see also, page 592, Figure 1). On page 593 ('Mixtures of ethanol and non-polar solvents'), tris-maleate buffer and benzyl alcohol were mixed with radiolabeled E. coli (the radiolabeled composition generated from E. coli in the presence of 14C-oleic acid). Thus, since Applicant's claim is not limited to any particular type/group of radiocomposition, E. coli meets Applicant's composition requirements. In regards to Applicant's assertion regarding Table 3 of Gustafson, it is noted that in both Applicant's first approach and Example 23, like Gustafson, other components, not benzyl alcohol alone, are present in the mixture to yield the desired result. Also, according to Table 23 (see below), the release of radioactivity with benzyl alcohol alone is 5.0 +/- 3.7 whereas benzyl alcohol in combination with ethanol has a released radioactivity amount of 50.9 +/- 9.3 which is more than 10% and would be considered to be a significant increase in radioactivity recovery.

Table 3 *Release of ^{14}C-radioactivity from radiolabelled E coli incubated with various non-polar solvents, alone or together with ethanol (33%).(Values are mean ± SD of three to six experiments)*

Solvent	Released radioactivity	
	Solvent alone	Solvent + ethanol
Ethanol	7·0 ± 2·2	—
1-Butanol	14·7 ± 7·4	73·9 ± 7·9
Benzyl alcohol	5·0 ± 3·7	50·9 ± 9·3
Ethyl acetate	ND	45·6 ± 0·9
Toluene	ND	5·2 ± 2·1
Xylene	ND	2·0 ± 1·8
Chloroform	ND	4·7 ± 0·2

ND = Not detectable.

103 Rejection

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 193, 194, 214, 215, 219-221, and 223-228 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu et al (US 2002/0122768).

Liu et al disclose stable radiopharmaceutical compositions of methods of preparing the compositions. The compositions comprise a radionuclide and an effective stabilizing amount of an aromatic stabilizer that may be used alone or in combination with other stabilizers. The purpose of the stabilizer is to inhibit radiolytic degradation of the radiopharmaceutical (see entire document, especially, abstract; page 3, paragraph [0035]; pages 3-4, paragraph [0036]). The radiopharmaceutical agents may comprise a chelating agent, radionuclide, linking group, and a biological molecule/targeting agent (page 4, paragraphs [0037] – [0069]). Possible stabilizers that may be used alone or in combination include benzyl alcohol and ascorbic acid (page 4, paragraph [0053]; page 5, paragraph [0070]; page 6, paragraph [0098]; page 20, paragraphs [0360] – [0364]). Possible metal chelators include DTPA, DOTA, DO3A, and other cyclic and acyclic polyaminocarboxylates (page 16, paragraphs [0314] – [0315]). Suitable radionuclides include selenium-75, technetium-99m, gallium-67, scandium-47, copper-64, and gold-199 (page 17, paragraphs [0321] and [0322]). Various biomolecules ranging from EGF,

interleukin, interferon, luteinizing hormone releasing factor to other proteins, antibodies, antibody fragments, peptides, polypeptides, or peptidomimetics (pages 18-20, [0338] - [0355]; page 21, paragraph [0372]). In addition, Liu et al disclose Compound A (pages 23-26, paragraphs [0404] – [0420] and Compound C (pages 32 - 36, paragraph [0449] – [0458]), for example, disclose compounds having a targeting agent, chelator, radionuclide, and linker. Thus, a skilled artisan would recognize that radioactivity from the radiopharmaceutical composition reaction would increase because radiolytic degradation of the radiopharmaceutical is inhibited (see abstract; page 9, paragraph [0134]). Hence, both Applicant and Liu et al disclose an increase of radioactivity recovery resulting from a radiopharmaceutical composition reaction.

APPLICANT'S ASSERTIONS

In summary, the following assertions are made regarding Liu et al. Liu et al dis directed to an aromatic stabilizer for use in stabilizing radiopharmaceutical compositions. The formula of Liu et al does not include benzyl alcohol. Liu et al teaches that an optional second stabilizer such as benzyl alcohol may be used. However, Liu et al only teaches that the second stabilizer is used in addition to the claimed aromatic stabilizer to increase the stability of radiopharmaceutical compositions. Thus, no data is available to establish that benzyl alcohol had the ability to act as a stabilizer is provided by Liu et al. Also, it is asserted that Liu et al fail to teach or suggest that benzyl alcohol may be used to solubilize a radiopharmaceutical of limited solubility. It is asserted that Liu et al fail to teach, disclose, identify, or discuss

the problem solved by the instant invention and that the document does not teach or suggest that benzyl alcohol may be used to solubilize a radiopharmaceutical of limited solubility.

EXAMINER'S RESPONSE

Applicant's arguments were considered, but found non-persuasive for the reasons set forth below. First, Applicant is reminded that a compound/composition is inseparable from its properties. Thus, if both Applicant and the prior art are using benzyl alcohol, the properties possessed by the compound in the compositions would inherently be the same. Hence, the skilled artisan would recognize that both Applicant's benzyl alcohol and the prior art's benzyl alcohol would have the ability to increase the recovery of radioactivity whether or not such property is specifically stated in the cited prior art.

In regards to Applicant's assertion that Liu et al neither teaches nor suggests that benzyl alcohol may be used as anything other than a second stabilizer in a stabilizing composition including a claimed aromatic stabilizer. The teachings of Liu et al are not limited to any specific radiopharmaceutical composition (soluble, insoluble, or limited solubility). A skilled artisan would recognize that the radiopharmaceutical compositions of Liu et al may be used for a variety of medical therapy and diagnostic purposes (see Liu et al abstract). In addition, based on pages 20-21, paragraphs [0359] – [0374], the skilled artisan would be motivated to optimize (a) the stabilizer combinations and amounts for the desired purpose (i.e., treating cancer), (b) the other components

present in the mixture, and (c) the dosage form and so forth based on the disclosure of Liu et al.

The instant claims disclose that benzyl alcohol is added to a reaction mixture. The mixture does not exclude the presence of any components such as a first stabilizer disclosed in Liu et al in addition with benzyl alcohol. On page 4 of Liu et al, paragraph [0053], it is disclosed that a second stabilizer (i.e., benzyl alcohol may be added). Thus, the skilled artisan would recognize that benzyl alcohol has stabilizing characteristics whether or not data is presented establishing that it has the ability to act as a stabilizer (note that Liu et al has identified benzyl alcohol as a possible stabilizer). Also, on page 20, paragraph [0365], Liu et al disclose why one may desire the presence of one or more stabilizers in a mixture. Furthermore, while Liu et al does not specifically disclose data for benzyl alcohol, on page 40, Table 7 (see below), the data for various other second stabilizers and a control sample (having no secondary stabilizer). The data indicates that in each instance wherein a second stabilizer is present, there is enhanced stabilizing ability than with a first stabilizer alone. Thus, the skilled artisan would be motivated to not only use the first stabilizer of Liu et al alone, but in combination with a second stabilizer such as benzyl alcohol which is listed as an optional second stabilizer by Liu et al.

TABLE 7

RCP data for ^{90}Y-B prepared using 2 mg of sodium gentisate (GA) as the stabilizer and sodium ascorbate (AA, 1 mCi/mg), 2,4-disulfonatobenzene-amine (mono potassium salt, DSA, 1 mCi/mg), 2,3,4-trihydroxybenzoic acid (2,3,4-THBA, 2 mCi/mg), and 3-Amino-4-hydroxybenzoic acid (HABA, 2 mCi/mg).

Second Stabilizer	RCP (%) t = 0	RCP (%) t = 3 days	RCP (%) t = 7 days	RCP (%) change
No second stabilizer	93.9	90.5	88	5.9
20 mg AA	95.0	93.9	94.5	0.5
20 mg DSA	94.4	94.8	94.5	0.1
10 mg 2,3,4-THBA	94.2	93.6	93.9	0.3
10 mg HABA	94.8	94.5	94.0	0.8

Hence, the rejection over Liu et al is deemed proper.

WITHDRAWN CLAIMS

3. Claims 216 and 218 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected species.

SPECIFICATION

4. The disclosure is objected to because of the following informalities: on page 48, lines 6, 13, 19, 25, and 31, there are question marks before the wavelength. Did Applicant intend to correct/remove the information?

Appropriate correction is required.

Notes: It is duly noted that Applicant attempted to amend the specification to make the appropriate corrections in the response filed 3/8/11. However, the amendment was not entered because it was non-compliant (see the notice mailed to Applicant on 4/14/11). Thus, Applicant is once again respectfully requested to make the corrections to the originally filed specification, not the published application.

COMMENTS/NOTES

5. It should be noted that while the Examiner indicated that no prior art was the cited against the elected species (the species of claim 217), Applicant still MUST address and overcome the 112 rejections above. In particular, the prior art neither anticipates nor renders obvious Applicant's elected species.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. L. Jones whose telephone number is (571)272-0617. The examiner can normally be reached on Mon.-Fri., 6:45 a.m. - 3:15 p.m.. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Michael Hartley can be reached on (571) 272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. L. Jones/
Primary Examiner
Art Unit 1618

July 25, 2011